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1997

Nebraska Summary: S269 Case-IH MX 170

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SUMMARY OF OECD TEST 1764—NEBRASKA SUMMARY 269

CASE IH MX 170 POWERSHIFT DIESEL

16 SPEED

POWER TAKE-OFF PERFORMANCE

Power HP (kW)	Crank shaft speed rpm	Gal/hr (l/h)	lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Mean Atmospheric Conditions
MAXIMUM POWER AND FUEL CONSUMPTION					
Rated Engine Speed (PTO speed—1000 rpm)					
146.17 (109.00)	2209	8.62 (32.63)	0.415 (0.252)	16.95 (3.34)	
Maximum Power (2 hours)					
156.09 (116.40)	1900	8.75 (33.12)	0.395 (0.240)	17.82 (3.51)	

VARYING POWER AND FUEL CONSUMPTION

146.17 (109.00)	2209	8.62 (32.63)	0.415 (0.252)	16.95 (3.34)	Air temperature
126.19 (94.10)	2243	7.88 (29.82)	0.439 (0.267)	16.01 (3.16)	73°F (23°C)
96.42 (71.90)	2287	6.42 (24.32)	0.469 (0.285)	15.02 (2.96)	Relative humidity
65.84 (49.10)	2340	5.07 (19.20)	0.543 (0.330)	12.98 (2.56)	60%
33.65 (25.10)	2386	3.61 (13.68)	0.756 (0.460)	9.31 (1.83)	Barometer
--	2430	2.23 (8.40)	--	--	29.5"Hg (99.8 kPa)
--			--	--	

Maximum Torque 471 lb.-ft. (638 Nm) at 1600 rpm
 Maximum Torque Rise 35.5%
 Torque rise at 1800 engine rpm – 27%

Location of Test: Bundesanstalt fur Landtechnik,
 A-3250 Weiselburg, Austria

Dates of Test: December 1997–February 1998

Manufacturer: Case United Kingdom Limited,
 Wheatley Hall Road, Doncaster England DN2
 4PG and Case Corporation, 700 State Street,
 Racine, WI 53403

FUEL AND OIL: Fuel No. 2 Diesel **Specific gravity converted to 60°/60° F (15°/15°C)** 0.845
Fuel weight 7.03 lbs/gal (0.843 kg/l) **Oil** SAE 15W-40 **API service classification** CE **Oil consumption for 10 hrs** 1.73 lb (786 gm)
Transmission and hydraulic lubricant Case IH Hytran-Plus fluid **Front axle lubricant** SAE 85W140 gear oil.

ENGINE: Make CDC Diesel **Type** six cylinder vertical with turbocharger and intercooler **Serial No.** 45515363 **Crankshaft** lengthwise **Rated engine speed** 2200 **Bore and stroke** 4.016" × 4.724" (102.0 mm × 120.0 mm) **Compression ratio** 17.5 to 1 **Displacement** 359 cu in (5883 ml) **Starting system** 12 volt **Lubrication** pressure **Air cleaner** two paper elements and aspirator **Oil filter** one full flow cartridge **Oil cooler** engine coolant heat exchanger for crankcase oil, radiator for hydraulic and transmission oil **Fuel filter** one paper element **Muffler** vertical **Cooling medium temperature control** thermostat and variable speed fan.

CHASSIS: **Type** front wheel assist **Serial No.** *X170ACH75EOTH0595A* **Tread width** rear 66.0" (1676 mm) to 124.6" (3165 mm) front 64.2" (1630 mm) to 87.8" (2230 mm) **Wheel base** 112.2" (2850 mm) **Hydraulic control system** direct engine drive **Transmission** selective gear fixed ratio with partial (4) range operator controlled powershift **Nominal travel speeds mph (km/h)** first 1.34 (2.16) second 1.62 (2.60) third 2.00 (3.22) fourth 2.48 (3.99) fifth 3.06 (4.93) sixth 3.68 (5.93) seventh 4.55 (7.33) eighth 5.03 (8.10) ninth 5.64 (9.08) tenth 6.06 (9.75) eleventh 7.49 (12.05) twelfth 9.28 (14.93) thirteenth 9.92 (15.97) fourteenth 11.96 (19.24) fifteenth 14.78 (23.78) sixteenth 18.31 (29.46) reverse 1.69 (2.72), 2.04 (3.28), 2.52 (4.05), 3.12 (5.02), 3.86 (6.21), 4.65 (7.48), 5.74 (9.24), 6.34 (10.20), 7.11 (11.44), 7.64 (12.29), 9.44 (15.19), 11.69 (18.82) **Clutch** multiple wet disc hydraulically operated by foot pedal **Brakes** wet multiple disc hydraulically operated by two foot pedals that can be locked together **Steering** hydrostatic **Power take-off** 540 rpm at 2163 engine rpm or 1000 rpm at 2209 engine rpm **Unladen tractor mass** 16250 lb (7370 kg).

REPAIRS AND ADJUSTMENTS: No repairs or adjustments.

DRAWBAR PERFORMANCE (Ballasted)

Power Hp (kW)	Drawbar pull lbs (kN)	Speed mph (km/h)	Crank- shaft speed rpm	Slip %	Fuel Consumption lb/hp.hr (kg/kW.h)	Hp.hr/gal (kW.h/l)	Temp. °F (°C) cool- ing med	Air dry bulb	Barom. inch Hg (kPa)
75% of Pull at Maximum Power—Five Hours (III-1) Gear									
107.02 (79.81)	7975 (35.47)	5.04 (8.12)	2266	2.9	0.469 (0.285)	14.99 (2.95)	178 (81)	52 (11)	29.4 (99.4)

MAXIMUM POWER IN SELECTED GEARS

3rd (I-3) Gear									
125.82 (93.82)	27900 (124.10)	1.69 (2.74)	2200	15.0	0.487 (0.296)	14.47 (2.85)	183 (84)	54 (12)	29.7 (100.5)
4th (I-4) Gear									
139.14 (103.76)	27295 (121.40)	1.91 (3.06)	1900	10.8	0.443 (0.269)	15.89 (3.13)	181 (83)	54 (12)	29.7 (100.5)
5th (II-1) Gear									
147.00 (109.60)	22150 (98.53)	2.49 (4.00)	1900	6.1	0.419 (0.255)	16.79 (3.31)	181 (83)	54 (12)	29.7 (100.5)
6th (II-2) Gear									
147.81 (110.22)	18260 (81.22)	3.04 (4.90)	1900	4.9	0.417 (0.254)	16.88 (3.33)	181 (83)	54 (12)	29.7 (100.5)
7th (II-3) Gear									
147.84 (110.25)	14720 (65.46)	3.77 (6.05)	1900	4.5	0.416 (0.253)	16.90 (3.33)	183 (84)	54 (12)	29.7 (100.5)
8th (III-1) Gear									
148.34 (110.62)	13160 (58.53)	4.22 (6.77)	1900	3.5	0.415 (0.252)	16.96 (3.34)	178 (81)	54 (12)	29.7 (100.5)
9th (II-4) Gear									
147.46 (109.96)	11720 (52.13)	4.72 (7.60)	1900	3.5	0.418 (0.254)	16.85 (3.32)	179 (82)	54 (12)	29.7 (100.5)
10th (III-2) Gear									
147.30 (109.84)	10880 (48.40)	5.08 (8.17)	1900	3.0	0.418 (0.254)	16.85 (3.32)	183 (84)	52 (11)	29.7 (100.5)
11th (III-3) Gear									
145.41 (108.43)	8665 (38.54)	6.29 (10.12)	1900	2.9	0.424 (0.258)	16.60 (3.27)	183 (84)	52 (11)	29.7 (100.5)
12th (III-4) Gear									
142.35 (106.15)	6855 (30.50)	7.79 (12.53)	1900	2.8	0.432 (0.263)	16.28 (3.21)	183 (84)	52 (11)	29.7 (100.5)
13th (IV-1) Gear									
142.17 (106.02)	6370 (28.32)	8.37 (13.46)	1900	2.5	0.434 (0.264)	16.22 (3.20)	181 (83)	52 (11)	29.7 (100.5)

REMARKS: All test results were determined from observed data obtained in accordance with official OECD test procedures. This tractor did not meet manufacturers claim of 28 gal/min (106 l/min) remote hydraulic flow. The performance results on this summary were taken from OECD tests conducted under the Code 1 Test Code Procedure.

We, the undersigned, certify that this is a true summary of data from OECD Report No. **1764**, Nebraska Summary 269, January 27, 1999.

LEONARD L. BASHFORD
Director

M.F. KOCHER
R.D. GRISSO
G.J. HOFFMAN
Board of Tractor Test Engineers

TIRES, BALLAST AND WEIGHT

Rear Tires—No., size, ply & psi (kPa)
Ballast—Liquid (total)
—Cast Iron (total)
Front Tires—No., size, ply & psi (kPa)
Ballast—Liquid (total)
—Cast Iron (total)

Height of Drawbar

Static Weight with Operator—Rear
—Front
—Total

With Ballast

Two 20.8R42; ***, 23(160)
None
5905 lb (2680 kg)
Two 480/70R30; **, 23(160)
1165 lb (528 kg)
4235 lb (1922 kg)
15.0 in (380 mm)
16665 lb (7560 kg)
11055 lb (5015 kg)
27720 lb (12575 kg)

Without Ballast

Two 20.8R42; ***, 12(80)
None
None
Two 480/70R30; **, 12(80)
None
None
15.0 in (380 mm)
9800 lb (4445 kg)
6615 lb (3000 kg)
16415 lb (7445 kg)

TRACTOR SOUND LEVEL WITH CAB	Front Wheel Drive	
	Disengaged dB(A)	Engaged dB(A)
Maximum sound level in 7th (II-3) Gear	73.5	72.5
Bystander in 16th (IV-4) Gear	85.6	--

CENTER OF GRAVITY

Horizontal distance forward from centerline of rear wheels	45.2 in (1148 mm)
Vertical distance above roadway	39.9 in (1013 mm)
Horizontal distance from center of rear wheel tread	1.0 in (25 mm) to the left

TURNING ON A CONCRETE SURFACE

Turning radius —with brake applied right 183" (4.64 m) left 182" (4.63 m)	
—without brake right 234" (5.95 m) left 236" (6.00 m)	
Turning space radius —with brake applied right 194" (4.93 m) left 194" (4.92 m)	
—without brake right 246" (6.24 m) left 248 in (6.29 m)	

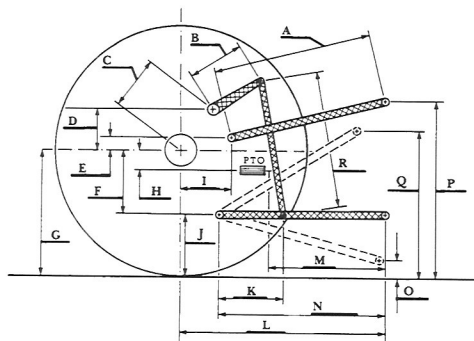
THREE POINT HITCH PERFORMANCE (OECD Static Test)

CATEGORY: III

Quick Attach: None

Maximum Force Exerted Through Whole Range:	13260 lbs (59.0 kN)
i) Opening pressure of relief valve:	NA
Sustained pressure of the open relief valve:	2900 psi (200 bar)
ii) Pump delivery rate at minimum pressure:	24.9 GPM (94.3 l/min)
iii) Pump delivery rate at maximum	
hydraulic power:	22.5 GPM (85.3 l/min)
Delivery pressure:	1960 psi (135 bar)
Power:	25.7 HP (192 kW)

HITCH DIMENSIONS AS TESTED—NO LOAD



	inch	mm
A	32.3	820
B	16.1	410
C	18.1	461
D	17.7	450
E	9.8	250
F	13.8	350
G	35.6	905
H	8.1	205
I	17.7	450
J	21.8	555
K	19.5	495
L	49.3	1253
M	25.6	651
N	39.5	1003
O	9.1	230
P	48.8	1240
Q	38.2	970
R	42.4	1076